Change to:

A1

The subject matter of this application is related to the subject matter of application 09/994,720 filed November 28, 2001, application number 09/994,739 filed November 28, 2001, application number 09/679,109 filed October 4, 2000 U.S. Patent 5,615,109 "Method of and System for Generating Feasible, Profit Maximizing Requisition Sets" and U.S. Patent 6,321,205 "Method of and System for Modeling and Analyzing Business Improvement Programs" by Jeff S. Eder, the disclosures of which are incorporated herein by reference.

Marked up original:

The subject matter of this application is related to the subject matter of application 09/994,720 filed November 28, 2001, application number 09/994,739 filed November 28, 2001, application number 09/679,109 filed October 4, 2000 U.S. Patent 5,615,109 "Method of and System for Generating Feasible, Profit Maximizing Requisition Sets" and U.S. Patent 6,321,205 "Method of and System for Modeling and Analyzing Business Improvement Programs" by Jeff S. Eder, the ~~disclosure~~disclosures of which ~~is~~are incorporated herein by reference.

IN THE CLAIMS

Change claims 1 through 30 to read as shown below on pages 3 through 7. A marked up version of the original claims is shown on pages 8 through 13.

Change to:

A2

1. (amended) A computer readable medium having sequences of instructions stored therein, which when executed cause a processor to perform a process optimization method, comprising:

obtaining process specification data, process feature data and the matrices of value and risk for the organization that owns the process;
identifying the impact of features on expected process outputs;
mapping the expected process outputs to the matrices of value and risk;
creating a financial simulation model using said mappings and data; and
determining the optimal mix of process features using said model.

C1

2. (amended) The computer readable medium of claim 1 that further comprises implementing the optimal mix in an automated fashion.

3. (amended) The computer readable medium of claim 1 where the optimal mix is the mix that maximizes organization value while minimizing organization risk.

4. (amended) The computer readable medium of claim 1 where process features encapsulate all the different options the organization management has available for performing a process.

5. (amended) The computer readable medium of claim 4 where process features include any options for implementing a process feature at a future date.

6. (amended) The computer readable medium of claim 6 where process data is obtained from a process system database.

7. (amended) The computer readable medium of claim 1 where simulation system data is optionally used to identify the impact of process features on process outputs, to identify the impact of process outputs on the matrix of value, to identify the impact of process outputs on the matrix of risk and combinations thereof.

8. (amended) The computer readable medium of claim 1 where the organization is a single product, a group of products, a division, a company, a multi-company corporation, a value chain and a collaborative multi-enterprise operation.

9. (amended) The computer readable medium of claim 1 where the simulation model is a Markov model.

10. (amended) The computer readable medium of claim 1 where the simulation model is a Markov Chain Monte Carlo model.

11. (amended) The computer readable medium of claim 10 where genetic algorithms are used for determining the optimal mix of features.

12. (amended) The computer readable medium of claim 1 where a multi-criteria optimization can be used to determine the optimal feature set when two or more aspects of organization financial performance are being optimized.

13. (amended) The computer readable medium of claim 12 wherein the two or more aspects of organization financial performance are selected from the group consisting of revenue, expense, capital change, current operation value, real option value, derivative value, excess financial asset value, market sentiment value, risk and business value.

14. (amended) The computer readable medium of claim 1 where the matrix of risk is defined by the organization segments of value and risks .

15. (amended) The computer readable medium of claim 14 where the organization risks are element variability risks, factor variability risks, market volatility risks, contingent liabilities, event risks and combinations thereof.

16. (amended) The computer readable medium of claim 15 where event risks are risks associated with accidents, weather phenomena including hurricanes and tornadoes, acts of nature including earthquakes and volcanoes, strategic risks from competitor actions and combinations thereof.

A2 cont

17. (amended) The computer readable medium of claim 15 where the elements are alliances, brands, channels, customers, customer relationships, employees, equipment, knowledge, intellectual property, investors, partnerships, processes, quality, vendors, vendor relationships, visitors and combinations thereof.

18. (amended) The computer readable medium of claim 15 where the factors are numerical indicators of conditions external to the organization, numerical indications of prices external to the organization, numerical indications of organization conditions compared to external expectations of organization condition, numerical indications of the organization performance compared to external expectations of organization performance and combinations thereof.

Claim 1 cont

19. (amended) The computer readable medium of claim 15 where the organization segments of value are current operations, real options, derivatives, excess financial assets, market sentiment and combinations thereof.

20. (amended) The computer readable medium of claim 1 where the matrix of risk is obtained from another system or developed from organization data.

21. (amended) The computer readable medium of claim 1 where the matrix of value is defined by the organization segments of value, elements of value and external factors.

22. (amended) The computer readable medium of claim 21 where the organization segments of value are current operations, real options, derivatives, excess financial assets, market sentiment and combinations thereof.

A3

23. (new) The computer readable medium of claim 21 where the organization elements of value are alliances, brands, channels, customers, customer relationships, employees, equipment, knowledge, intellectual property, investors, partnerships, processes, quality, vendors, vendor relationships, visitors and combinations thereof.

A3

24. (new) The computer readable medium of claim 21 where the external factors are numerical indicators of conditions external to the organization, numerical indications of prices external to the organization, numerical indications of organization conditions compared to external expectations of organization condition, numerical indications of the

organization performance compared to external expectations of organization performance and combinations thereof.

25. (new) The computer readable medium of claim 1 where the matrix of value is obtained from another system or developed from organization data.

26. (new) The computer readable medium of claim 1 that optionally displays the impact of the optimized feature mix on the position of the organization relative to the efficient frontier.

27. (new) The computer readable medium of claim 23 where the efficient frontier defines the maximum organization value that can be expected for a given level of risk.

26. (new) The computer readable medium of claim 1 where the set of features that brings expected organization risk and return closest to the efficient frontier is the optimal mix.

28. (new) The computer readable medium of claim 1 where the method further comprises displaying the organization value and the optimal mix using a paper document or electronic display.

29. (new) A process optimization system, comprising:

a plurality of computers connected by a network each with a processor having circuitry to execute instructions; a storage device available to each processor with sequences of instructions stored therein, which when executed cause the processors to:

obtaining process specification data, process feature data and the matrices of value and risk for the organization that owns the process;

identifying the impact of features on expected process outputs;

mapping the expected process outputs to the matrices of value and risk;

creating a financial simulation model using said mappings and data;

determining the optimal mix of process features using said model; and

implementing the optimal mix in an automated fashion.

30. (new) The system of claim 29 where the optimal mix is the mix that maximizes organization value while minimizing organization risk.

Marked up original:

1. ~~A computer system that determines the optimal mix of features and feature options for a process from the perspective of the process owner, the system comprising:~~(amended) A computer readable medium having sequences of instructions stored therein, which when executed cause a processor to perform a process optimization method, comprising:

~~means for~~ obtaining process ~~management~~specification data, ~~external factor prices~~process feature data and the matrices of value and risk for the ~~owner;~~organization that owns the process;

~~means for representing~~identifying the impact of ~~one or more process~~ features ~~and one or more process feature options~~ on expected process outputs;

mapping the expected process ~~deliverables;~~

~~means for mapping process deliverables~~outputs to the matrices of value and risk ~~for the owner;~~;

~~means for optimizing the mix of process features and feature options from the perspective of the process owner;~~

~~means for displaying~~creating a financial simulation model using said mappings and data; and

determining the optimal mix of process features ~~and feature options~~using said model.

2. ~~The system of claim 1 where the real option segment of value is valued using Black Scholes algorithms.~~(amended) The computer readable medium of claim 1 that further comprises implementing the optimal mix in an automated fashion.

3. ~~The system of claim 1 where the matrix of value for the owner is subdivided in up to five segments of value, current operation, real options, derivatives, excess financial assets and market sentiment.~~(amended) The computer readable medium of claim 1 where the optimal mix is the mix that maximizes organization value while minimizing organization risk.

4. ~~The system of claim 1 where the display of the optimal mix includes a graphic display of the impact of the optimized process on the efficient frontier of the process owner.~~(amended) The computer readable medium of claim 1 where process features

encapsulate all the different options the organization management has available for performing a process.

5. ~~The system of claim 1 further comprising the use of optimization algorithms for determining the optimal mix of features and feature options.~~(amended) The computer readable medium of claim 4 where process features include any options for implementing a process feature at a future date.

6. ~~The system of claim 1 further comprising the use of genetic algorithms for determining the optimal mix of features and feature options.~~(amended) The computer readable medium of claim 6 where process data is obtained from a process system database.

7. (amended) The ~~system~~computer readable medium of claim 1 ~~further comprising the optional use of~~where simulation system data is optionally used to ~~represent~~identify the impact of ~~one or more~~ process features ~~and one or more feature options~~ on process ~~deliverables.~~outputs, to identify the impact of process outputs on the matrix of value, to identify the impact of process outputs on the matrix of risk and combinations thereof.

8. ~~The system of claim 1 where the matrix of risk for the owner is subdivided in up to five segments: current operation, real options, derivatives, excess financial assets and market sentiment.~~(amended) The computer readable medium of claim 1 where the organization is a single product, a group of products, a division, a company, a multi-company corporation, a value chain and a collaborative multi-enterprise operation.

9. ~~The system of claim 1 where the matrix of risk for the owner includes risk from element variability, risk from external factor variability and event risk.~~(amended) The computer readable medium of claim 1 where the simulation model is a Markov model.

10. ~~The system of claim 1 where the matrix of risk for the owner includes risk from element variability, risk from external factor variability and event risk by segment of value.~~(amended) The computer readable medium of claim 1 where the simulation model is a Markov Chain Monte Carlo model.

11. ~~A data processing method for operating a process to maximize value to the owner:~~(amended) The computer readable medium of claim 10 where genetic algorithms are used for determining the optimal mix of features.

~~obtaining the matrix of value and the matrix of risk for the owner of the process and external factor price information;~~

~~organizing process management information into resources, deliverables, one or more features and one or more feature options;~~

~~determining a contribution of each of one or more features to the process deliverables;~~

~~mapping the process deliverables, resources and features to the matrices of value and risk for the owner, and~~

~~optimizing the feature and feature option mix to maximize process value from the perspective of the owner.~~

12. ~~A computer readable medium having computer executable instructions thereon for causing a computer to perform the method of claim 11.~~(amended) The computer readable medium of claim 1 where a multi-criteria optimization can be used to determine the optimal feature set when two or more aspects of organization financial performance are being optimized.

13. ~~A method for determining the optimal mix of features and feature options for a process from the perspective of the process owner, the system comprising:~~(amended) The computer readable medium of claim 12 wherein the two or more aspects of organization financial performance are selected from the group consisting of revenue, expense, capital change, current operation value, real option value, derivative value, excess financial asset value, market sentiment value, risk and business value.

~~obtaining process management data, external factor prices and the matrices of value and risk for the owner;~~

~~representing the impact of one or more features and one or more feature options on process deliverables;~~

~~mapping the expected process outputs to the matrices of value and risk for the owner;~~

~~optimizing the mix of process features and feature options from the perspective of the process owner;~~

~~displaying the optimal mix of process features and feature options.~~

14. ~~The method of claim 13 where the real option segment of value is valued using Black Scholes algorithms.~~(amended) The computer readable medium of claim 1 where the matrix of risk is defined by the organization segments of value and risks .

15. ~~The method of claim 13 where the matrix of value for the owner is subdivided in up to five segments of value, current operation, real options, derivatives, excess financial assets and market sentiment.~~(amended) The computer readable medium of claim 14 where the organization risks are element variability risks, factor variability risks, market volatility risks, contingent liabilities, event risks and combinations thereof.

16. ~~The method of claim 13 where the display of the optimal mix includes a graphic display of the impact of the optimized process on the efficient frontier of the process owner.~~(amended) The computer readable' medium of claim 15 where event risks are risks associated with accidents, weather phenomena including hurricanes and tornadoes, acts of nature including earthquakes and volcanoes, strategic risks from competitor actions and combinations thereof.

17. ~~The method of claim 13 further comprising the use of optimization algorithms for determining the optimal mix of features and feature options.~~(amended) The computer readable medium of claim 15 where the elements are alliances, brands, channels, customers, customer relationships, employees, equipment, knowledge, intellectual property, investors, partnerships, processes, quality, vendors, vendor relationships, visitors and combinations thereof.

18. ~~The method of claim 13 further comprising the use of genetic algorithms for determining the optimal mix of features and feature options.~~(amended) The computer readable medium of claim 15 where the factors are numerical indicators of conditions external to the organization, numerical indications of prices external to the organization, numerical indications of organization conditions compared to external expectations of organization condition, numerical indications of the organization performance compared to external expectations of organization performance and combinations thereof.

19. ~~The method of claim 13 further comprising the optional use of simulation system data to represent the impact of one or more features and one or more feature options on process deliverables.~~(amended) The computer readable medium of claim 15 where

the organization segments of value are current operations, real options, derivatives, excess financial assets, market sentiment and combinations thereof.

20. ~~The method of claim 13 where the matrix of risk for the owner is subdivided in up to five segments: current operation, real options, derivatives, excess financial assets and market sentiment.~~(amended) The computer readable medium of claim 1 where the matrix of risk is obtained from another system or developed from organization data.

21. ~~The method of claim 13 where the matrix of risk for the owner includes risk from element variability, risk from external factor variability and event risk.~~(amended) The computer readable medium of claim 1 where the matrix of value is defined by the organization segments of value, elements of value and external factors.

22. ~~The method of claim 13 where the matrix of risk for the owner includes risk from element variability, risk from external factor variability and event risk by segment of value.~~(amended) The computer readable medium of claim 21 where the organization segments of value are current operations, real options, derivatives, excess financial assets, market sentiment and combinations thereof.

23. ~~A computer readable medium having computer executable instructions thereon for causing a computer to perform the method of claim 13.~~(new) The computer readable medium of claim 21 where the organization elements of value are alliances, brands, channels, customers, customer relationships, employees, equipment, knowledge, intellectual property, investors, partnerships, processes, quality, vendors, vendor relationships, visitors and combinations thereof.

24. (new) The computer readable medium of claim 21 where the external factors are numerical indicators of conditions external to the organization, numerical indications of prices external to the organization, numerical indications of organization conditions compared to external expectations of organization condition, numerical indications of the organization performance compared to external expectations of organization performance and combinations thereof.

25. (new) The computer readable medium of claim 1 where the matrix of value is obtained from another system or developed from organization data.

26. (new) The computer readable medium of claim 1 that optionally displays the impact of the optimized feature mix on the position of the organization relative to the efficient frontier.

27. (new) The computer readable medium of claim 23 where the efficient frontier defines the maximum organization value that can be expected for a given level of risk.

26. (new) The computer readable medium of claim 1 where the set of features that brings expected organization risk and return closest to the efficient frontier is the optimal mix.

28. (new) The computer readable medium of claim 1 where the method further comprises displaying the organization value and the optimal mix using a paper document or electronic display.

29. (new) A process optimization system, comprising:

a plurality of computers connected by a network each with a processor having circuitry to execute instructions; a storage device available to each processor with sequences of instructions stored therein, which when executed cause the processors to:

obtaining process specification data, process feature data and the matrices of value and risk for the organization that owns the process;
identifying the impact of features on expected process outputs;
mapping the expected process outputs to the matrices of value and risk;
creating a financial simulation model using said mappings and data;
determining the optimal mix of process features using said model; and
implementing the optimal mix in an automated fashion.

30. (new) The system of claim 29 where the optimal mix is the mix that maximizes organization value while minimizing organization risk.